

# SEQUENCE LISTING

<110> Gerard Marx  
Raphael Gorodetsky

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<130> 2488.014

<140> 10/533,826

<141> 2005-05-03

<150> PCT/IL03/000911

<151> 2003-11-03

<150> IL152609

<151> 2002-11-03

<160> 124

<170> PatentIn version 3.3

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<211> 180

<212> PRT

<213> Homo sapiens

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Met Lys Ser Ile Tyr Phe Val Ala Gly Leu Phe Val Met Leu Val Gln  
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Gly Ser Trp Gln Arg Ser Leu Gln Asp Thr Glu Glu Lys Ser Arg Ser  
20 25 30

Phe Ser Ala Ser Gln Ala Asp Pro Leu Ser Asp Pro Asp Gln Met Asn  
35 40 45

Glu Asp Lys Arg His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys  
50 55 60

Tyr Leu Asp Ser Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn  
65 70 75 80

Thr Lys Arg Asn Arg Asn Asn Ile Ala Lys Arg His Asp Glu Phe Glu  
85 90 95

Arg His Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu

100	105	110
Gly Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Gly		
115	120	125
Arg Arg Asp Phe Pro Glu Glu Val Ala Ile Val Glu Glu Leu Gly Arg		
130	135	140
Arg His Ala Asp Gly Ser Phe Ser Asp Glu Met Asn Thr Ile Leu Asp		
145	150	155
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Asn Leu Ala Ala Arg Asp Phe Ile Asn Trp Leu Ile Gln Thr Lys Ile		
165	170	175
Thr Asp Arg Lys		
180		

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 ctcagtgatc ctgatcagat gaacgaggac aagcgccatt cacagggcac attcaccagt 180  
 gactacagca agtatctgga ctccaggcgt gccaagatt ttgtgcagtg gttgatgaat 240  
 accaagagga acaggaataa cattgccaaa cgtcacgatg aatttgagag acatgctgaa 300  
 gggaccttta ccagtgatgt aagttcttat ttggaaggcc aagctgcca ggaattcatt 360  
 gcttggtgg tgaaaggccg aggaaggcga gatttcccag aagaggtcgc cattgttgaa 420  
 gaacttggcc gcagacatgc tgatggttct ttctctgatg agatgaacac cattcttgat 480  
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Gly Ser Trp Gln Arg Ser Leu Gln Asp Thr Glu Glu Lys Ser Arg Ser  
 20 25 30

Phe Ser Ala Ser Gln Ala Asp Pro Leu Ser Asp Pro Asp Gln Met Asn  
 35 40 45

Glu Asp Lys Arg His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys  
 50 55 60

Tyr Leu Asp Ser Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn  
 65 70 75 80

Thr Lys Arg Asn Arg Asn Asn Ile Ala Lys Arg His Asp Glu Phe Glu  
 85 90 95

Arg His Ala Glu Gly Thr Phe Thr Ser Asp Phe Pro Arg Arg Gly Arg  
 100 105 110

His Cys

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 ctcaagtgatc ctgatcagat gaacgaggac aagcgccatt cacagggcac attcaccagt 180  
 gactacagca agtatctgga ctccaggcgt gcccaagatt ttgtgcagtg gttgatgaat 240  
 accaagagga acaggaataa cattgccaaa cgtcacgatg aatttgagag acatgctgaa 300  
 gggaccttta ccagtgattt tcccagaaga ggtcgccatt gttgaagaac ttggccgcag 360  
 acatgctgat ggttctttct ctgatgagat gaacaccatt cttgataatc ttgccgccag 420  
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Pro Arg Arg Gly Arg  
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His Asp Glu Phe Glu Arg His Ala Glu Gly Thr Phe Thr Ser Asp Phe  
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Pro Arg Arg

<210> 11  
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<213> Homo sapiens

<400> 11

His Ala Glu Gly Thr Phe Thr Ser Asp Phe Pro Arg Arg Gly Arg His  
1 5 10 15

Cys

<210> 12  
<211> 16  
<212> PRT  
<213> Homo sapiens

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1 5 10 15

<210> 13  
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<210> 14  
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<400> 14

His Ala Glu Gly Thr Phe Thr Ser Asp Phe Pro Arg Arg  
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<211> 24  
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<222> (24)..(24)  
<223> Xaa=amide

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Pro Arg Arg Gly Arg His Cys Xaa  
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<223> Xaa=amide

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1 5 10 15

Pro Arg Arg Gly Arg His Xaa  
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<210> 17  
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<222> (22)..(22)  
<223> Xaa=amide

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1 5 10 15

Pro Arg Arg Gly Arg Xaa  
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<210> 18  
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<223> Xaa=amide

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1 5 10 15

Pro Arg Arg Xaa  
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1 5 10 15

Cys Xaa

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<223> Xaa=amide

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Xaa

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<400> 21

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<400> 22

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cgccattgt 69

<210> 24  
<211> 66  
<212> DNA  
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 <212> DNA  
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<400> 36

Phe Pro Arg Arg Gly Arg His  
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Phe Pro Arg Arg Gly Arg  
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<400> 38

Phe Pro Arg Arg  
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<211> 37  
<212> PRT  
<213> Homo sapiens

<400> 39

His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Ser  
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Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Lys Arg Asn  
 20 25 30

Arg Asn Asn Ile Ala  
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<210> 40  
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 <212> DNA  
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 gattttgtgc agtggttgat gaataccaag aggaacagga ataacattgc c 111

<210> 41  
 <211> 62  
 <212> PRT  
 <213> Homo sapiens

<400> 41

His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Ser  
 1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Lys Arg Asn  
 20 25 30

Arg Asn Asn Ile Ala Lys Arg His Asp Glu Phe Glu Arg His Ala Glu  
 35 40 45

Gly Thr Phe Thr Ser Asp Phe Pro Arg Arg Gly Arg His Cys  
 50 55 60

<210> 42  
 <211> 61  
 <212> PRT  
 <213> Homo sapiens

<400> 42

His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Ser  
 1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Lys Arg Asn  
 20 25 30

Arg Asn Asn Ile Ala Lys Arg His Asp Glu Phe Glu Arg His Ala Glu  
 35 40 45

Gly Thr Phe Thr Ser Asp Phe Pro Arg Arg Gly Arg His  
 50 55 60

<210> 43  
 <211> 60  
 <212> PRT  
 <213> Homo sapiens

<400> 43

His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Ser  
 1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Lys Arg Asn  
 20 25 30

Arg Asn Asn Ile Ala Lys Arg His Asp Glu Phe Glu Arg His Ala Glu  
 35 40 45

Gly Thr Phe Thr Ser Asp Phe Pro Arg Arg Gly Arg  
 50 55 60

<210> 44  
 <211> 58  
 <212> PRT  
 <213> Homo sapiens

<400> 44

His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Ser  
 1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Lys Arg Asn  
 20 25 30

Arg Asn Asn Ile Ala Lys Arg His Asp Glu Phe Glu Arg His Ala Glu  
 35 40 45

Gly Thr Phe Thr Ser Asp Phe Pro Arg Arg  
 50 55

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 <211> 186  
 <212> DNA

<213> Homo sapiens

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gattttgtgc agtggttgat gaataccaag aggaacagga ataacattgc caaacgtcac 120  
gatgaatttg agagacatgc tgaagggacc ttaccagtg attttcccag aagaggtcgc 180  
cattgt 186

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<211> 183

<212> DNA

<213> Homo sapiens

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gattttgtgc agtggttgat gaataccaag aggaacagga ataacattgc caaacgtcac 120  
gatgaatttg agagacatgc tgaagggacc ttaccagtg attttcccag aagaggtcgc 180  
cat 183

<210> 47

<211> 180

<212> DNA

<213> Homo sapiens

<400> 47

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gattttgtgc agtggttgat gaataccaag aggaacagga ataacattgc caaacgtcac 120  
gatgaatttg agagacatgc tgaagggacc ttaccagtg attttcccag aagaggtcgc 180

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<211> 174

<212> DNA

<213> Homo sapiens

<400> 48

cattcacagg gcacattcac cagtgactac agcaagtatc tggactccag gcgtgccccaa 60  
gattttgtgc agtggttgat gaataccaag aggaacagga ataacattgc caaacgtcac 120  
gatgaatttg agagacatgc tgaagggacc ttaccagtg attttcccag aaga 174

<210> 49

<211> 25

<212> PRT

<213> Artificial

<220>

<223> synthetic peptide

<400> 49

Lys Arg His Asp Glu Phe Glu Arg His Ala Glu Gly Thr Phe Thr Ser  
1 5 10 15

Asp Phe Pro Arg Arg Gly Arg His Cys  
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<210> 50

<211> 24

<212> PRT

<213> Artificial

<220>

<223> synthetic peptide

<400> 50

Lys Arg His Asp Glu Phe Glu Arg His Ala Glu Gly Thr Phe Thr Ser  
1 5 10 15

Asp Phe Pro Arg Arg Gly Arg His  
20

<210> 51

<211> 23

<212> PRT

<213> Artificial

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<400> 51

Lys Arg His Asp Glu Phe Glu Arg His Ala Glu Gly Thr Phe Thr Ser  
1 5 10 15

Asp Phe Pro Arg Arg Gly Arg  
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<210> 52

<211> 21

<212> PRT

<213> Artificial

<220>

<223> synthetic peptide



<400> 52

Lys Arg His Asp Glu Phe Glu Arg His Ala Glu Gly Thr Phe Thr Ser  
1 5 10 15

Asp Phe Pro Arg Arg  
20

<210> 53

<211> 75

<212> DNA

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agaggtcgcc attgt 75

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<211> 72

<212> DNA

<213> Artificial

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<223> synthetic oligonucleotide

<400> 54

aaacgtcacg atgaatttga gagacatgct gaagggacct ttaccagtga ttttcccaga 60

agaggtcgcc at 72

<210> 55

<211> 69

<212> DNA

<213> Artificial

<220>

<223> synthetic oligonucleotide

<400> 55

aaacgtcacg atgaatttga gagacatgct gaagggacct ttaccagtga ttttcccaga 60

agaggtcgc 69

<210> 56

<211> 63

<212> DNA

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 aga 63

<210> 57  
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 gctggattat ttgtaatgct ggtacaaggc agctggcaac gttcccttca agacacagag 180  
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 ggaaggcgag atttcccaga agaggtcgcc attggtgaag aacttggccg cagacatgct 540  
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 ataaactggg tgattcagac caaaatcact gacaggaaat aactatatca ctattcaaga 660  
 tcatcttcac aacatcacct gctagccacg tgggatgttt gaaatgttaa gtctgtaaa 720  
 tttaagaggt gtattctgag gccacattgc tttgcatgcc aataaataaa ttttctttta 780  
 gtgttggtgta gccaaaaatt acaaatggaa taaagtttta tcaaaatatt gctaaaatat 840  
 cagctttaaa atatgaaagt gctagattct gttatcttct tcttattttg gatgaagtac 900  
 cccaacctgt ttacatttag cgataaaatt atttttctat gatataattt gtaaatgtaa 960  
 attattccga tctgacatat ctgcattata ataataggag aatagaagaa ctggtagcca 1020  
 cagtggtgaa attggaaaga gaactttctt cctgaaacct ttgtcttaaa aatactcagc 1080  
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<212> PRT  
<213> Homo sapiens

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His Asp Glu Phe Glu Arg His Ala Glu Gly Thr Phe Thr Ser Asp Phe  
1 5 10 15

Pro

<210> 59  
<211> 11  
<212> PRT  
<213> Homo sapiens

<400> 59

His Ala Glu Gly Thr Phe Thr Ser Asp Phe Pro  
1 5 10

<210> 60  
<211> 18  
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<223> Xaa=amide

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1 5 10 15

Pro Xaa

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 <223> Xaa=amide

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<210> 62  
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<210> 63  
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 <213> Homo sapiens

<400> 63  
 catgctgaag ggacctttac cagtgatttt ccc 33

<210> 64  
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 1 5 10 15

Cys

<210> 65  
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 <212> PRT  
 <213> Homo sapiens

<400> 65

Met Val Phe Val Arg Arg Pro Trp Pro Ala Leu Thr Thr Val Leu Leu  
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Ala Leu Leu Val Cys Leu Gly Ala Leu Val Asp Ala Tyr Pro Ile Lys  
 20 25 30

Pro Glu Ala Pro Gly Glu Asp Ala Ser Pro Glu Glu Leu Asn Arg Tyr  
 35 40 45

Tyr Ala Ser Leu Arg His Tyr Leu Asn Leu Val Thr Arg Gln Arg Tyr  
 50 55 60

Gly Lys Arg Asp Gly Pro Asp Thr Leu Leu Ser Lys Thr Phe Phe Pro  
 65 70 75 80

Asp Gly Glu Asp Arg Pro Val Arg Ser Arg Ser Glu Gly Pro Asp Leu  
 85 90 95

Trp

<210> 66  
 <211> 36  
 <212> PRT  
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<400> 66

Tyr Pro Ile Lys Pro Glu Ala Pro Gly Glu Asp Ala Ser Pro Glu Glu  
 1 5 10 15

Leu Asn Arg Tyr Tyr Ala Ser Leu Arg His Tyr Leu Asn Leu Val Thr  
 20 25 30

Arg Gln Arg Tyr  
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<210> 67  
 <211> 34  
 <212> PRT  
 <213> Homo sapiens

<400> 67

Ile Lys Pro Glu Ala Pro Gly Glu Asp Ala Ser Pro Glu Glu Leu Asn  
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 20 25 30

Arg Tyr

<210> 68  
<211> 33  
<212> PRT  
<213> Homo sapiens  
  
<400> 68

Met Ala Thr Val Leu Leu Ala Leu Leu Val Tyr Leu Gly Ala Leu Val  
1 5 10 15

Asp Ala Tyr Pro Ile Lys Pro Glu Ala Pro Gly Glu Asp Ala Phe Leu  
20 25 30

Gly

<210> 69  
<211> 15  
<212> PRT  
<213> Homo sapiens  
  
<400> 69

Tyr Pro Ile Lys Pro Glu Ala Pro Gly Glu Asp Ala Phe Leu Gly  
1 5 10 15

<210> 70  
<211> 53  
<212> PRT  
<213> Homo sapiens  
  
<400> 70

Met Ala Thr Val Leu Leu Ala Leu Leu Val Tyr Leu Gly Ala Leu Val  
1 5 10 15

Asp Ala Tyr Pro Ile Lys Pro Glu Ala Pro Gly Glu Asp Ala Phe Leu  
20 25 30

Gly Glu Leu Ser Arg Cys Tyr Ala Tyr Pro Arg His Tyr Leu Ile Leu  
35 40 45

Val Thr Gln Pro Ser  
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<210> 71  
 <211> 35  
 <212> PRT  
 <213> Homo sapiens

<400> 71

Tyr Pro Ile Lys Pro Glu Ala Pro Gly Glu Asp Ala Phe Leu Gly Glu  
 1 5 10 15

Leu Ser Arg Cys Tyr Ala Tyr Pro Arg His Tyr Leu Ile Leu Val Thr  
 20 25 30

Gln Pro Ser  
 35

<210> 72  
 <211> 33  
 <212> PRT  
 <213> Homo sapiens

<400> 72

Ile Lys Pro Glu Ala Pro Gly Glu Asp Ala Phe Leu Gly Glu Leu Ser  
 1 5 10 15

Arg Cys Tyr Ala Tyr Pro Arg His Tyr Leu Ile Leu Val Thr Gln Pro  
 20 25 30

Ser

<210> 73  
 <211> 70  
 <212> PRT  
 <213> Homo sapiens

<400> 73

Met Val Phe Val Arg Arg Pro Trp Pro Ala Leu Thr Thr Val Leu Leu  
 1 5 10 15

Ala Leu Leu Val Cys Leu Gly Ala Leu Val Asp Ala Tyr Pro Ile Lys  
 20 25 30

Pro Glu Ala Pro Gly Glu Asp Ala Ser Pro Glu Glu Leu Asn Arg Tyr  
 35 40 45

Tyr Ala Ser Leu Arg His Tyr Leu Asn Leu Val Thr Arg Gln Arg Ser  
50 55 60

Glu Gly Pro Asp Leu Trp  
65 70

<210> 74  
<211> 42  
<212> PRT  
<213> Homo sapiens

<400> 74

Tyr Pro Ile Lys Pro Glu Ala Pro Gly Glu Asp Ala Ser Pro Glu Glu  
1 5 10 15

Leu Asn Arg Tyr Tyr Ala Ser Leu Arg His Tyr Leu Asn Leu Val Thr  
20 25 30

Arg Gln Arg Ser Glu Gly Pro Asp Leu Trp  
35 40

<210> 75  
<211> 40  
<212> PRT  
<213> Homo sapiens

<400> 75

Ile Lys Pro Glu Ala Pro Gly Glu Asp Ala Ser Pro Glu Glu Leu Asn  
1 5 10 15

Arg Tyr Tyr Ala Ser Leu Arg His Tyr Leu Asn Leu Val Thr Arg Gln  
20 25 30

Arg Ser Glu Gly Pro Asp Leu Trp  
35 40

<210> 76  
<211> 582  
<212> DNA  
<213> Homo sapiens

<400> 76  
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 <213> Homo sapiens

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cggcagcggc atgggaaaag agacggcccg gacaggcttc tttccaaaac gttcttcccc	240
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<210> 78  
 <211> 840  
 <212> DNA  
 <213> Homo sapiens

<400> 78	
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gttcgggtac tgcagtcccg cgtctggatg ccccgcccc cctgagctgc agggctgtgt	780
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<210> 79  
 <211> 102  
 <212> DNA  
 <213> Homo sapiens

<400> 79	
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atcaaaccgg aggtcccgg cgaagacgcc ttctgggggt ag	102

<210> 80  
 <211> 840  
 <212> DNA  
 <213> Homo sapiens

<400> 80	
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<210> 81  
 <211> 162  
 <212> DNA  
 <213> Homo sapiens

<400> 81  
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 taccctcgcc actacctcat cctggtcact cagccgctgt ga 162

<210> 82  
 <211> 501  
 <212> DNA  
 <213> Homo sapiens

<400> 82  
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<210> 83  
 <211> 213  
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 <213> Homo sapiens

<400> 83  
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<210> 84  
 <211> 550

<212> DNA  
 <213> Homo sapiens

<400> 84  
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<210> 85  
 <211> 469  
 <212> DNA  
 <213> Homo sapiens

<400> 85  
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<210> 86  
 <211> 97  
 <212> PRT  
 <213> Homo sapiens

<400> 86  
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 1 5 10 15

Ser Leu Leu Val Cys Leu Gly Ala Leu Ala Glu Ala Tyr Pro Ser Lys  
20 25 30

Pro Asp Asn Pro Gly Glu Asp Ala Pro Ala Glu Asp Met Ala Arg Tyr  
35 40 45

Tyr Ser Ala Leu Arg His Tyr Ile Asn Leu Ile Thr Arg Gln Arg Tyr  
50 55 60

Gly Lys Arg Ser Ser Pro Glu Thr Leu Ile Ser Asp Leu Leu Met Arg  
65 70 75 80

Glu Ser Thr Glu Asn Val Pro Arg Thr Arg Leu Glu Asp Pro Ala Met  
85 90 95

Trp

<210> 87  
<211> 70  
<212> PRT  
<213> Homo sapiens

<400> 87

Met Leu Gly Asn Lys Arg Leu Gly Leu Ser Gly Leu Thr Leu Ala Leu  
1 5 10 15

Ser Leu Leu Val Cys Leu Gly Ala Leu Ala Glu Ala Tyr Pro Ser Lys  
20 25 30

Pro Asp Asn Pro Gly Glu Asp Ala Pro Ala Glu Asp Met Ala Arg Tyr  
35 40 45

Tyr Ser Ala Leu Arg His Tyr Ile Asn Leu Ile Thr Arg Gln Arg Leu  
50 55 60

Glu Asp Pro Ala Met Trp  
65 70

<210> 88  
<211> 411  
<212> DNA  
<213> Homo sapiens

<400> 88  
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<210> 89  
<211> 339  
<212> DNA  
<213> Homo sapiens

<400> 89  
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<210> 90  
<211> 95  
<212> PRT  
<213> Homo sapiens

<400> 90

Met Ala Ala Ala Arg Leu Cys Leu Ser Leu Leu Leu Leu Ser Thr Cys  
1 5 10 15

Val Ala Leu Leu Leu Gln Pro Leu Leu Gly Ala Gln Gly Ala Pro Leu  
20 25 30

Glu Pro Val Tyr Pro Gly Asp Asn Ala Thr Pro Glu Gln Met Ala Gln  
35 40 45

Tyr Ala Ala Asp Leu Arg Arg Tyr Ile Asn Met Leu Thr Arg Pro Arg  
50 55 60

Tyr Gly Lys Arg His Lys Glu Asp Thr Leu Ala Phe Ser Glu Trp Gly  
65 70 75 80

Ser Pro His Ala Ala Val Pro Arg Glu Leu Ser Pro Leu Asp Leu  
85 90 95

<210> 91  
<211> 71  
<212> PRT  
<213> Homo sapiens

<400> 91

Met Ala Ala Ala Arg Leu Cys Leu Ser Leu Leu Leu Leu Ser Thr Cys  
1 5 10 15

Val Ala Leu Leu Leu Gln Pro Leu Leu Gly Ala Gln Gly Ala Pro Leu  
20 25 30

Glu Pro Val Tyr Pro Gly Asp Asn Ala Thr Pro Glu Gln Met Ala Gln  
35 40 45

Tyr Ala Ala Asp Leu Arg Arg Tyr Ile Asn Met Leu Thr Arg Pro Arg  
50 55 60

Glu Leu Ser Pro Leu Asp Leu  
65 70

<210> 92  
<211> 1462  
<212> DNA  
<213> Homo sapiens

<400> 92

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<210> 93  
<211> 89  
<212> PRT  
<213> Homo sapiens

<400> 93

Met Gly Ile Leu Lys Leu Gln Val Phe Leu Ile Val Leu Ser Val Ala  
1 5 10 15

Leu Asn His Leu Lys Ala Thr Pro Ile Glu Ser His Gln Val Glu Lys  
20 25 30

Arg Lys Cys Asn Thr Ala Thr Cys Ala Thr Gln Arg Leu Ala Asn Phe  
35 40 45

Leu Val His Ser Ser Asn Asn Phe Gly Ala Ile Leu Ser Ser Thr Asn



50

55

60

Val Gly Ser Asn Thr Tyr Gly Lys Arg Asn Ala Val Glu Val Leu Lys  
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Arg Glu Pro Leu Asn Tyr Leu Pro Leu  
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<210> 94  
 <211> 2048  
 <212> DNA  
 <213> Homo sapiens

<400> 94  
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<210> 95
<211> 103
<212> PRT
<213> Homo sapiens

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<400> 95

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Leu Asn His Leu Lys Ala Thr Pro Ile Glu Arg Cys Leu Asp Gln Ile
20           25           30

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Pro Ile Phe Thr Val Phe Gln Glu Asn His Gln Val Glu Lys Arg Lys
35           40           45

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Cys Asn Thr Ala Thr Cys Ala Thr Gln Arg Leu Ala Asn Phe Leu Val
50           55           60

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His Ser Ser Asn Asn Phe Gly Ala Ile Leu Ser Ser Thr Asn Val Gly
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Ser Asn Thr Tyr Gly Lys Arg Asn Ala Val Glu Val Leu Lys Arg Glu  
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Pro Leu Asn Tyr Leu Pro Leu  
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<210> 96

<211> 2098

<212> DNA

<213> Homo sapiens

<400> 96

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<400> 97

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20 25 30

Pro Val Leu Ser Arg Asn Ile Leu Leu Glu Leu Arg Gly Ala Lys Pro  
35 40 45

Glu His Glu Ala Gly Lys Lys Ser Lys Val Ile Arg Trp Lys Ser Gly  
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Asn Ala Thr Leu Pro His Val Gln Arg Ser Ala Trp Gln Ile Phe  
65 70 75

<210> 98

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<220>  
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<400> 98

Arg Cys Leu Asp Gln Ile Pro Ile Phe Thr Val Phe Gln Glu Asn  
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<400> 99

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Leu Arg Gly Ala Lys Pro Glu His Glu Ala Gly Lys Lys Ser Lys Val  
20 25 30

Ile Arg Trp Lys Ser Gly Asn Ala Thr Leu Pro His Val Gln Arg Ser  
35 40 45

Ala Trp Gln Ile Phe  
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<212> PRT  
<213> Homo sapiens

<400> 100

Tyr Pro Ser Lys Pro Asp Asn Pro Gly Glu Asp Ala Pro Ala Glu Asp  
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20 25 30

Arg Gln Arg Tyr  
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<211> 42  
<212> PRT  
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<400> 101

Tyr Pro Ser Lys Pro Asp Asn Pro Gly Glu Asp Ala Pro Ala Glu Asp  
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Met Ala Arg Tyr Tyr Ser Ala Leu Arg His Tyr Ile Asn Leu Ile Thr  
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Arg Gln Arg Leu Glu Asp Pro Ala Met Trp  
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<210> 102  
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<400> 102

Ser Lys Pro Asp Asn Pro Gly Glu Asp Ala Pro Ala Glu Asp Met Ala  
1 5 10 15

Arg Tyr Tyr Ser Ala Leu Arg His Tyr Ile Asn Leu Ile Thr Arg Gln  
20 25 30

Arg Tyr

<210> 103  
<211> 40  
<212> PRT  
<213> Homo sapiens

<400> 103

Ser Lys Pro Asp Asn Pro Gly Glu Asp Ala Pro Ala Glu Asp Met Ala  
1 5 10 15

Arg Tyr Tyr Ser Ala Leu Arg His Tyr Ile Asn Leu Ile Thr Arg Gln  
20 25 30

Arg Leu Glu Asp Pro Ala Met Trp  
35 40

<210> 104  
<211> 36  
<212> PRT  
<213> Homo sapiens

<400> 104

Ala Pro Leu Glu Pro Val Tyr Pro Gly Asp Asn Ala Thr Pro Glu Gln  
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Met Ala Gln Tyr Ala Ala Asp Leu Arg Arg Tyr Ile Asn Met Leu Thr  
20 25 30

Arg Pro Arg Tyr  
35

<210> 105  
<211> 42  
<212> PRT  
<213> Homo sapiens

<400> 105

Ala Pro Leu Glu Pro Val Tyr Pro Gly Asp Asn Ala Thr Pro Glu Gln  
1 5 10 15

Met Ala Gln Tyr Ala Ala Asp Leu Arg Arg Tyr Ile Asn Met Leu Thr  
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Arg Pro Arg Glu Leu Ser Pro Leu Asp Leu  
35 40

<210> 106  
<211> 34  
<212> PRT  
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<400> 106

Leu Glu Pro Val Tyr Pro Gly Asp Asn Ala Thr Pro Glu Gln Met Ala  
1 5 10 15

Gln Tyr Ala Ala Asp Leu Arg Arg Tyr Ile Asn Met Leu Thr Arg Pro  
20 25 30

Arg Tyr

<210> 107  
 <211> 40  
 <212> PRT  
 <213> Homo sapiens

<400> 107

Leu Glu Pro Val Tyr Pro Gly Asp Asn Ala Thr Pro Glu Gln Met Ala  
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Gln Tyr Ala Ala Asp Leu Arg Arg Tyr Ile Asn Met Leu Thr Arg Pro  
 20 25 30

Arg Glu Leu Ser Pro Leu Asp Leu  
 35 40

<210> 108  
 <211> 777  
 <212> DNA  
 <213> Gallus gallus

<400> 108

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 aagctacatc tattgagaaa ttattatctg tgactgacga tctctctgat gggacttcca 240  
 agaggcaaga atggatactg ccataatgt cacagaatac actctcagga cttagtggag 300  
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 gcaacactgc tacatgtgtg acacaacgct tggctgactt cttagtctgt tccagcagca 420  
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 tgcattgtata acatcatgca taggctatcg tttcaaattc tttaagaact ccagaagtct 720  
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<210> 109  
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 <213> Artificial



<220>  
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<400> 109

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<210> 110  
<211> 16  
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<223> synthetic peptide

<400> 110

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<212> DNA  
<213> Homo sapiens

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<212> PRT  
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<400> 112

Ser Glu Gly Pro Asp Leu Trp  
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<210> 113  
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<220>  
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<400> 113

Leu Glu Asp Pro Ala Met Trp  
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<210> 114  
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<212> PRT  
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<400> 114

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<212> DNA  
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 <212> DNA  
 <213> Homo sapiens

<400> 116	
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<210> 117  
 <211> 527  
 <212> DNA  
 <213> Homo sapiens

<400> 117  
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<220>  
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<212> DNA  
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<220>  
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<400> 119  
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<210> 120  
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<400> 120  
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<210> 121  
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